

6P1731
JPC

PTO/SB/21 (04-04)

TRANSMITTAL
FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/020,461
Filing Date	December 14, 2001
First Named Inventor	M'Saad, Hichem
Art Unit	1731
Examiner Name	Hoffmann, John M.

Attorney Docket No. A6123/T43700

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Return Postcard, copies of seven (7) cited references
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s)	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name

Townsend and Townsend and Crew LLP

Patrick M. Boucher

Reg. No. 44,037

Signature

Date

2004 November 8

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Nicole Wartell

Signature

Date

11/08/2004

NOV 10 2004

O P E J C S
PATENT & TRADEMARK OFFICE

FEET TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 180)

Complete if Known	
Application Number	10/020,461
Filing Date	December 14, 2001
First Named Inventor	M'Saad, Hichem
Examiner Name	Hoffmann, John M.
Art Unit	1731
Attorney Docket No.	A6123/T43700

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order Other None
 Deposit Account:

Deposit Account Number

20-1430

Deposit Account Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fee(s)
 Charge fee(s) indicated below, except for the filing fee
 to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee Description	
1001 790	2001 395	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1)

(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Fee from below	Fee Paid
Total Claims	**	=	
Independent Claims	**	=	
Multiple Dependent		X	

Large Entity

Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202 18	2202 9			Claims in excess of 20
1201 88	2201 44			Independent claims in excess of 3
1203 300	2203 150			Multiple dependent claim, if not paid
1204 88	2204 44			** Reissue independent claims over original patent
1205 18	2205 9			** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid		
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
Other fee (specify)					

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$180)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Patrick M. Boucher	Registration No. (Attorney/Agent)	44,037	Telephone	303-571-4000
Signature			Date	2004 November 8	

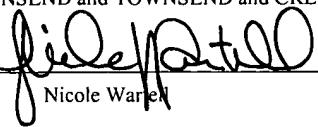
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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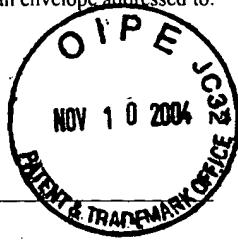
Commissioner for Patents
P.O. Box 1450
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On Nov 8, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: 

Nicole Warfel



PATENT

Attorney Docket No.: A6123/T43700
AMAT No.: 006123/DD/HDP/JW
TTC Reference No. 016301-043700US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HICHEM M'SAAD et al.

Application No.: 10/020,461

Filed: December 14, 2001

For: METHOD OF MANUFACTURING
AN OPTICAL CORE

Examiner: Hoffmann, John M.

Art Unit: 1731

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

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11/10/2004 SSITHIBI 00000069 201430
180.00 DA
01 FC:1806

Applicant is resubmitting the foreign and non-patent literature references listed on forms PTO/SB/08A and PTO/SB/08B in order to correct any deficiency from previous submissions. The following translations of the abstracts of the foreign references are provided, and constitute the entire understanding of the relevance of the references as understood by the undersigned. No English translation of the entire references is known to be available to any individual specified in 37 C.F.R. §1.56(c).

1. EP 0 659 902

Plasma-assisted CVD of a silica thin film on a substrate involves: (a) introducing oxygen and opt. argon into a vacuum chamber, igniting the plasma and then introducing silane; and (b) carrying out the process under the conditions of 40-80 (pref. 60) microbars gas pressure in the chamber, 0-35 (pref. 10) cu.cm/min. argon supply rate, 12-24 (pref. 12) cu.cm/min. silane supply rate, 13-38 (pref. 26-38) cu.cm/min. oxygen supply rate, 200-300 (pref. 200) deg. C substrate temp. and 750- 1100 (pref. 1100) W plasma reactor power. Phosphine may also be introduced into the chamber to dope the silica thin film.

Also claimed in an appts. for carrying out silica thin film CVD.

USE - E.g. in the production of a planar optical waveguide on a silicon substrate or in the mfg. of a flat LCD screen

ADVANTAGE - The process allows deposition of silica containing very little hydrogen (10-100 ppm) at close to 200 deg. C and produces 0.1-10 microns thick deposits in a few minutes.

2. EP 0 735 160

In a process for CVD of a silica thin film, for an integrated optical waveguide, from O₂ and SiCl₄ with microwave-generated plasma assistance, the novelty is that: (a) the substrate temp. is maintained at 200-800 (pref. 500-600) deg.C; (b) the CVD chamber pressure is maintained at 1-20 Pa; and (c) the SiCl₄-contg. reactive gas is injected between the plasma and the substrate within the chamber. Pref. the plasma is created from O₂ and the reactive gas also

contains a carrier gas and opt. one or more dopants such as GeCl₄, C₂F₆, POCl₃ and/or BC₁₃.

Also claimed are: (i) a CVD appts. for carrying out the above process; and (ii) an integrated optical waveguide mfg. method including the above process.

ADVANTAGE - The process produces a thin film with improved thickness and optical index uniformity, while maintaining high deposition rate, a reduced number of process steps and a low process tem. (< 800 deg. C). Additionally, the thin film has acceptable optical attenuation at 1.55 and 1.3 mum, without the need for a supplementary annealing step.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or

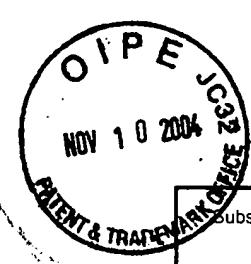
Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,


Patrick M. Boucher
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
PMB:nmb



Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/020,461
(use as many sheets as necessary)				Filing Date	December 14, 2001
				First Named Inventor	M'Saad, Hichem
				Art Unit	1731
				Examiner Name	Hoffmann, John M.
Sheet	1	of	2	Attorney Docket Number	A6123/T43700

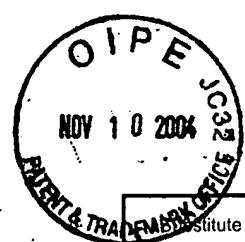
U.S. PATENT DOCUMENTS+						
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	US-6,080,683		06-27-2000	Faur et al.	
	A2	US-6,204,200 B1		03-20-2001	Shieh et al.	
	A3					
	A4					
	A5					

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	B1	EPO	EP 0 659 902	A1	06-28-1995			<input type="checkbox"/>
	B2	EPO	EP 0 735 160	B1	08-30-2000			<input type="checkbox"/>
	B3							<input type="checkbox"/>

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	2	of	2	Application Number	10/020,461
				Filing Date	December 14, 2001
				First Named Inventor	M'Saad, Hichem
				Art Unit	1731
				Examiner Name	Hoffmann, John M.
				Attorney Docket Number	A6123/T43700

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	MATTHEWS, MANYALIBO J. et al. "Characterization of phosphosilicate thin films using confocal Raman microscopy" Review of Scientific Instruments, May 2000, pp. 2117-2120, Vol. 71, No. 5, American Institute of Physics.	
	C2	VALETTE, S. et al. "Si-Based Integrated Optics Technologies" Solid State Technology, February 1989, pp. 69-75.	
	C3	VALETTE, S. et al. "State of the art of integrated optics technology at LETI for achieving passive optical components" Journal of Modern Optics, 1988, pp. 993-1005, Vol. 35, No. 6.	

Examiner Signature	Date Considered
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¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.